Commonwealth of Kentucky Division for Air Quality

COMMENTS AND RESPONSE

ON THE DRAFT PERMIT

Title V, Operating Permit: V-08-002

Griffin Industries, Inc.
Cold Spring, KY 41076-1897
May 22, 2008
Massoud Kayvanjah, Reviewer

SOURCE ID: 21-191-00007

AGENCY INTEREST: 3408

ACTIVITY: APE20070001

SOURCE DESCRIPTION:

On December 12, 2007 Griffin Industries, Inc. (Griffin) submitted a renewal application of their permit V-02-033R1 for their rendering and bakery scrap facilities in Butler, Pendleton County, Kentucky. The rendering facility processes animal by-product materials into tallow, grease, and high protein meat and bone meal. The bakery scrap operation dries scrap breads and dough to form cookie meal. There have been no significant changes at the facility since the last permitting action.

PUBLIC AND AFFECTED STATE REVIEW:

Affected states (Ohio and Indiana) were notified of the issuance of the draft permit on April 7, 2008 via e-mail. On April 15, 2008, the public notice on availability of the draft permit and supporting material for comments by persons affected by the plant was published in *Falmouth Outlook* in Falmouth, Kentucky. The public comment period expired 30 days from the date of publication.

Comments were received from Griffin Industries on May 14, 2008. Minor changes were made to the permit as a result of the comments received; however, in no case were any emissions standards, or any monitoring, recordkeeping or reporting requirements relaxed. The following is a detailed explanation of changes made to the permit and the supporting documents. The U.S. EPA has 45-days to comment on this proposed permit.

COMMENTS AND RESPONSE:

Comments on the Draft Title V Air Quality Permit submitted by F. Michael Schmidt, Corporate Environmental Coordinator of the Griffin Industries, Inc. on May 15, 2008.

1. First Page of the Permit:

On the signature page, the Review Type should read: "Title V Operating / Synthetic Minor(.)"

Division's response: Synthetic Minor is a preconstruction type of permit given by the State. The

current review was for a renewal of the Title V permit. The Title V permit will still carry the federally enforceable limits that established the source as a synthetic minor source. It is not necessary to change the signature page.

2. <u>Section B - Emissions Unit (EU): 01 and 02, Indirect Heat Exchangers</u> <u>Description:</u> (page 2 of 29)

Under the heading "*Description*" Griffin requests that the new line: "*Control Process: Low NOx burner and flew gas recirculation*" be deleted as this is inaccurate.

2. Miscellaneous - Source subject to 112(r) should be checked. Ammonia is used for Unit 1's Selective Catalytic Reduction (SCR) system (post combustion NOx control equipment).

Division's response: Comment acknowledged, and the control equipment has been removed from the description.

3. Operating Limitations: (page 2 of 29)

While it appears that **Section B – Emission Points, Emission Units, Applicable Regulations, AND OPERATING CONDITIONS** actually begins on page 2, the header has been mistakenly omitted from this page.

Division's response: Comment acknowledged, and the omission has been corrected.

Permit Condition (PC) 1.a: Griffin believes that there is an error that changed the allowable volume of #6 fuel oil consumption from 537,000 gallons to 510,000 gallons. Griffin requests that this be corrected to 537,000 gallons to reflect what is in the current permit, or an explanation be provided for the change to 510,000 gallons.

Division's response: The Division concurs and has corrected the fuel consumption number to 537,000 gallon per year

4. Emissions Limitations: (page 3 of 29)

PC 2.a: Griffin believes that there is an error that changed the allowable particulate (PM) emissions from 0.36 lb/MMBtu to 0.32 lb/MMBtu. Using the equation found in 401 KAR 59:015 the allowable emissions should be: $0.9634 \times (33.5 \times 2)^{-0.2356} = 0.35775$

PC 2.c: Griffin believes that there is an error that changed the allowable sulfur dioxide (SO₂) emissions from 1.37 lb/MMBtu to 1.11 lb/MMBtu. Using the equation found in 401 KAR 59:015 the allowable emissions should be 7.7223 (33.5 x 2) $^{-0.4106}$ = 1.374

PC 2.d: The value for total halogens in the On-Spec Used Oil Specifications table has been mistakenly entered as 900 ppm when it should be 800 ppm.

Division's response: Comment acknowledged, and the permit emission limits have been updated.

Compliance Demonstration Method: (page 4 of 29)

The emission factor (EF) definition has been revised to remove the term "AP-42 emission factor or". Griffin requests that this be defined as it is in the current permit.

Division's response: The deletion was an editorial error and has been corrected

5. Testing Requirements: (page 4 of 29)

PC 3.a: This condition adds a new requirement to conduct a performance test for PM and SO₂ on either EU 01 or 02 within six months of permit issuance. These are new testing requirements on an existing source not previously required to be tested by current or past permits; therefore Griffin questions the need for this testing and respectfully requests that this requirement be deleted and the condition changed to read: "None". Griffin will continue to demonstrate compliance with the PM limits using AP-42 emission factors and the SO₂ limits using fuel supplier certification sheets and AP-42 emission factors.

PC 3.b.: Griffin requests that this PC be deleted for the same reasons noted above for PC 3.a.

Division's response: The test data that was used to permit this facility's initial Title V permit is over five years which not representative or reliable data to depend on for the renewal permit. Title V permits are required to include monitoring such that " If the applicable requirement does not require periodic testing or monitoring, the permit shall contain periodic monitoring sufficient to yield reliable data from the relevant time period representative of the source's compliance with the permit. "

> The Division finds that it is appropriate to require a representative performance test for particulates from either EU 01 or 02 to ensure compliance with the particulate standards. AP-42 contains average emission factors appropriate for inventory purposes, but is not appropriate for determining the compliance of an individual unit. The Division will modify the testing language to extend the timeframe to the first eighteen months after initial permit issuance. The Division agrees that compliance with the SO₂ limits are determined through fuel certification for the #6 oil and will not require periodic testing.

> Since the renewal is another five years of the Title V permit, it is required of the permittee to perform the test to meet the requirements of 401 KAR 50:045. On the contrary, if the facility has test data less than five years from the said unit, it may substitute that for the testing requirement.

6. Specific Monitoring Requirements: (page 5 of 29)

PC 4.a: Griffin believes that there is an error that mistakenly entered the frequency for performing a qualitative visible emissions (VE) observation as a daily requirement when it should be a weekly requirement. Griffin has been conducting these VE observations on a weekly basis for the entire term of this permit and can demonstrate that the readings would justify a decrease in the frequency, not an increase. Griffin respectfully requests that this requirement be changed to a biweekly requirement or back to a weekly requirement.

Division's response: Division concurs and has amended the permit.

7. EU: 03 (Point 03) Indirect Heat Exchanger (Formerly EU 04)

Testing Requirements: (page 7 of 29)

PC 3.a: This condition has been modified to add a new requirement to submit a schedule within six months of permit issuance to conduct a performance test for PM and SO₂ within one year of permit issuance. Griffin conducted, and passed, a performance test for PM on this source in January 2005 and the sulfur content of the coal burned also demonstrates compliance with the SO2 limits. Therefore, Griffin respectfully requests that this PC be deleted and replaced with "None".

PC 3.b.: Griffin requests that this PC be deleted for the same reasons as noted above for PC 3.a.

Division's response: See response to comment #5

8. Description (page 9 of 29)

Because this source is only regulated by 401 KAR 59:010, New Process Operations, and the facility wide PM emissions are not synthetically limited, Griffin believes that the operating capacity should not be limited. Griffin therefore respectfully requests that the operating capacity be deleted from the description.

Division's response: Information contained in the "Description" portion of a permit is just that, a description derived from information contained in the application. It is not an enforceable operating limit on the unit. Operating capacity was in the initial permitting action and used to determine or calculate the emission for the entire facility. If this information is in error, the permittee may file a new application for a permit revision.

9. Testing Requirements: (page 9 of 29)

PC 3.: This condition has been revised to add a new requirement to conduct a performance test for PM within six months of permit issuance. Griffin conducted a performance test for PM on this source in February 2004. These tests confirmed that PM emissions were only 0.233 lb/hr, or approximately 1.1% of the allowable PM emission rate. Based on this exceptionally low emission rate this requirement is unjustified and overly burdensome. Griffin respectfully requests that this PC be deleted and replaced with "None".

Division's response: See response to comment #5

10. Specific Monitoring Requirements: (page 9 of 29)

PC 4.a: Griffin believes that there is an error that mistakenly changed the frequency for performing a qualitative VE observation from a weekly requirement to a daily requirement. Griffin has been conducting these VE observations on a weekly basis for the entire term of this permit and can demonstrate that the readings have consistently been zero. Griffin respectfully asks that this PC be deleted and replaced with "None", or be changed back to a weekly requirement.

Division's response: The daily VE has been changed to weekly.

11. <u>EU: 05 (Point 06)</u> Raw material and stock unloading, storage, and loading to feed <u>hoppers</u> (Formerly EU 06) To clarify the name of this source Griffin requests that the name be changed to read: "*Emissions Unit 05 (Point 06) Blending Stock Unloading, Storage, and Transfer to Process Feed Hoppers*". Description: (page 11 of 29)

Because this source is only regulated by 401 KAR 63:010, fugitive emissions, the operating rate is not used to demonstrate compliance. Griffin therefore requests that the operating rate be deleted and the "*Description*" be changed to read:

"Receiving of blending stock by hopper bottom trailer to in-ground receiving hopper. Transfer of materials by covered screw conveyor to process feed bin or storage silo."

Division's response: Comment acknowledged and the correction has been made

12. <u>EU: 06 (Point 07) Close-Coupled Gasification (CCG) unit and Dryer</u> (Formerly EU 07)

Description: (page 12 of 29)

The maximum feed rate of bakery scrap to the dryer is incorrectly listed at 25 tons/hour, maximum 50 tons/day. This should read "25 tons/hour, maximum 600 tons/day." This was derived by the following equation: $25 \text{ ton/hr } \times 24 \text{ hrs/day} = 600 \text{ tons/day}$

Division's response: After discussion with Mr. Mike Schmidt, corporate environmental

coordinator of Griffin Industries, the dryer and the gasifier should have different feed rates under the descriptions to identify each unit properly. The dyer description changes have been made in the proposed permit to reflect

the correct process flow at the site.

13. Emissions Limitations: (page 12 of 29)

The "Compliance Demonstration Method" of this Section should be revised to read: "For compliance with the allowable particulate standard, <u>a</u> particulate emissions factor derived from the performance test on the Griffin's Henderson, KY facility in January 2004 shall be used. The average PM emissions were 1.67 lb/hr."

Division's response: Comment acknowledged. The Compliance Demonstration language has been revised.

14. Testing Requirements: (page 13 of 29)

PC 3: This condition has been modified to add a requirement to conduct a performance test for PM within six months of permit issuance. First, there is no emissions limit on PM from the rotary dryer exhaust stack. The only PM emission limit is on the emissions from the CCG unit and these cannot be tested independently as they are combined with the PM emissions from the drying process prior to being discharge to the atmosphere. Second, based on the exceptionally low emission rate as measured on an identical system located at our Henderson, Kentucky facility, Griffin believes that the requirement to conduct a stack test is unjustified and overly burdensome. Griffin therefore respectfully requests that this condition be deleted and replaced with "*None*".

Division's response: See response to comment #5.

15. Specific Monitoring Requirements: (page 13 of 29)

PC 4.a: Griffin has been conducting these VE observations on a weekly basis for the entire term of this permit and can demonstrate that the readings would justify a decrease in the frequency. Griffin respectfully requests that this requirement be changed to a biweekly requirement.

Division's response: The daily visual observations have been changed to weekly instead of the requested biweekly

16. Specific Recordkeeping Requirements: (page 13 of 29)

PC 5.b: Griffin believes that there is an error that mistakenly substituted the word "scrubbers" for "cyclones". This source does not have scrubbers but does have a product recovery cyclone at the exit end of the rotary dryer.

Division's response: Comment acknowledged and any reference to control equipment has been deleted

18. EU: 07 (Point 08) Product/Stock mixing, Size Reduction, and Storage (Formerly EU 08) Griffin believes that a word was mistakenly omitted from the name and requests that this EU name be changed to clarify the name. Griffin suggests that it be changed to read: "Emissions Unit 07 (Point 08) Product/Blending Stock Mixing, Size Reduction, and Storage.

Division's response: Comment acknowledged, and the change has been made.

19. Description: (page 14 of 29)

Because this source is only regulated by 401 KAR 59:010 and 401 KAR 50:010, the operating rate is not used to demonstrate compliance. Griffin therefore requests that the operating rate be deleted and the "*Description*" be changed to read: "*Mixing of blending stock with dried product*

Size reduction by vibrating screens Transfer to storage via covered screw and belt conveyors"

Division's response: The Division does not concur with the request to delete the operating rate from the **Description**. See Response to Comment #8. However, the suggested change in description has been utilized in the permit.

20. Emissions Limitations: (page 14 of 29)

It appears that the formula used in the "Compliance Demonstration Method" of this Section was changed to use the emission factor from a performance test that is required by PC 3 below. Because of reasons specified below Griffin believes that this condition should be reworded to read:

"Compliance with the allowable particulate standard shall be demonstrated by the following formula:

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Particulate emissions = [EF (lbs/ton)] * [P (tons/hr)]

EF = the latest AP-42 emission factor

P = weekly average processing rate"
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Division's response: The Division concurs and has revised the permit.

21. <u>Testing Requirements</u>: (page 14 of 29)

PC 3: This condition has been modified to add a requirement to conduct a performance test for PM within six months of permit issuance. Griffin believes that this is an error as Point 08 emissions are fugitive emissions. There is no exhaust stack for this process that can be sampled for PM emissions. Griffin suggests that this testing requirement cannot be met and therefore requests that the testing requirement be deleted and the condition changed to read: "None".

Division's response: The Division concurs that a performance test for PM cannot be conducted at this emission point and has replaced the requirement with an opacity monitoring requirement.

22. EU: 08 (Point 09) Product Loadout (Formerly EU 09)

<u>Description</u>: (page 16 of 29) Because this source is only regulated by 401 KAR 63:010, the operating rate is not used to demonstrate compliance. Griffin therefore requests that the operating rate be deleted and the Description be changed to read:

"Product is loaded onto trucks inside the storage building using mobile equipment and an overhead screw conveyor."

Division's response: The Division does not concur with request to delete the operating rate.

Please see Response to Comment #8

23. OTHER COMMENTS

Permit Application Summary Form

Griffin believes that the **PERMIT APPLICATION SUMMARY FORM**, Application Type/Permit Activity be changed by checking the Synthetic Minor box.

Division's response: The Division does not concur. See response to comment #1.

25. PERMIT STATEMENT OF BASIS

Please make changes to all pertinent Sections of the Permit Statement of Basis as described in the document above.

Division's response: Comment acknowledged and changes made.

CREDIBLE EVIDENCE:

This permit contains provisions which require that specific test methods, monitoring or recordkeeping be used as a demonstration of compliance with permit limits. On February 24, 1997, the U.S. EPA promulgated revisions to the following federal regulations: 40 CFR Part 51, Sec. 51.212; 40 CFR Part 52, Sec. 52.12; 40 CFR Part 52, Sec. 52.30; 40 CFR Part 60, Sec. 60.11 and 40 CFR Part 61, Sec. 61.12, that allow the use of credible evidence to establish compliance with applicable requirements. At the issuance of this permit, Kentucky has only adopted the provisions of 40 CFR Part 60, Sec. 60.11 and 40 CFR Part 61, Sec. 61.12 into its air quality regulations.